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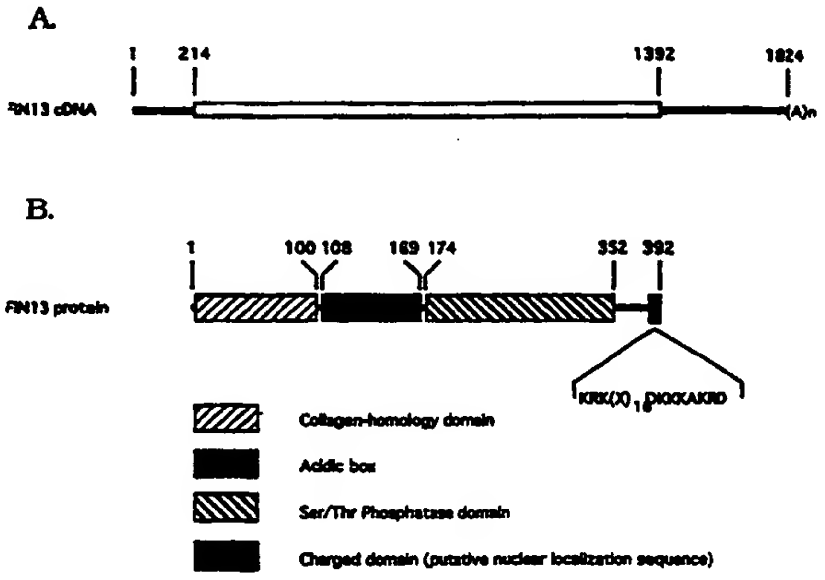

(57) Abstract

A serine/threonine, FIN13, which includes a collagen-homology domain, an acidic box domain, a catalytic domain, and a putative nuclear translocation sequence. The present invention further relates to the modulation of cellular proliferation, by regulating the activity of the novel serine/threonine phosphatase. Thus, the invention provides the phosphatase, nucleic acids encoding the phosphatase, oligonucleotides specific for such nucleic acids, antibodies to the phosphatase, and method for increasing (or decreasing) the activity of the phosphatase to inhibit (or enhance) cellular proliferation and, thus, tissue growth. Various diagnostic and therapeutic aspects of the invention particularly relate to detection and treatment of hyperproliferative disorders, neoplasms, and tumors. In specific examples, FIN13 is expressed in proliferating cells, notably germ cells of the testes. Increased levels of expression of FIN13 in transfected cells results in a decrease in the cell growth rate.